

Appl. No. : 09/980,559
Filed : May 14, 2002

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph on page 10 between the lines 26 and 33 with the following amended paragraph:

Figure 3 shows the alignment of the hypervariable region 1 sequences from 8 J6S clones of strain HC-J6_{CH} (J6S1 – SEQ ID NO: 39; J6S2 – SEQ IS NO: 40; J6S3 – SEQ ID NO: 41; J6S5 – SEQ ID NO: 42; J6S6 – SEQ ID NO: 43; J6S7 – SEQ ID NO: 44; J6S8 – SEQ ID NO: 45; J6S4 – SEQ ID NO: 46). HC-J6_{CH} (SEQ ID NO: 47) represents the consensus amino acid sequence of the infectious plasma pool from an experimentally infected chimpanzee. HC-J6 (SEQ ID NO: 48) is the published amino acid sequence of the original inoculum (Okamoto et al., 1991).

Please replace the paragraph on page 11 between the lines 7 and 24 with the following amended paragraph:

Figures 5A and 5B show the alignment of the nucleotide sequences of the 5' (H77CV-J6S – SEQ ID NO: 50; H77(p7)CV-J6S – SEQ ID NO: 51; H77-J6S – SEQ ID NO: 52; H77(p7)-J6S – SEQ ID NO: 53) (Fig. 5A) and 3' UTRs (H77C – SEQ ID NO: 55; H77CV-J6S – SEQ ID NO: 56; H77(p7)CV-J6S – SEQ ID NO: 57; H77-J6S – SEQ ID NO: 58; H77(p7)-J6S – SEQ ID NO: 59; J6CF – SEQ ID NO: 60) (Fig. 5B) and the amino acid sequences of E2/p7/NS2 junctions (H77C – SEQ ID NO: 61; H77CV-J6S – SEQ ID NO: 62; H77(p7)CV-J6S – SEQ ID NO: 63; H77-J6S – SEQ ID NO: 64; H77(p7)-J6S – SEQ ID NO: 65; J6CF – SEQ ID NO: 66) (Fig. 5B) in the intertypic 1a, 2a chimeric cDNA clones. In the 5' UTR alignment, the first 39 nts of core believed to be important for the IRES function were included (Lemon and Honda, 1997). Top line: the sequence of the infectious genotype 1a clone pCV-H77C (Yanagi et al., 1997) (SEQ ID NO: 49). Bottom line: the sequence of the infectious genotype 2a clone pJ6CF (SEQ ID NO: 54). Dot: identity with the sequence of H77C. Capital. letter: different from the sequence of H77C. Dash: deletion. Bold face: initiation or stop codon of the ORF. Underlined: *Age*I cleavage site. Arrow: putative sites in the HCV polyprotein cleaved by host signal peptidases. Numbering corresponds to the sequence of pCV-H77C.

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Please replace the paragraph on page 11 between the lines 25 and 28 with the following amended paragraph:

Figures 6A-6F show the nucleotide sequence of the infectious hepatitis C virus clone of genotype 1a strain H77C (SEQ ID NO: 67) and Figures 6G-6H show the amino acid sequence encoded by the clone (SEQ ID NO: 68).

Please replace the paragraph on page 11 between the lines 29 and 33 with the following amended paragraph:

Figures 7A-7F show the nucleotide sequence of the infectious hepatitis C virus clone of genotype 1b strain HC-J4 (SEQ ID NO: 69) and Figures 7G-H show the amino acid sequence encoded by the clone (SEQ ID NO: 70).

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Please replace the Table 1 on page 30 with the following amended table:

TABLE 1

Oligonucleotides used for amplification and cloning of strain HC- J6CH, genotype 2a

Designation	Sequence (51 --> 31)a
2427S-H77	ACTGGACACGGAGGTGGCCGCGTC (SEQ ID NO: 11)
2426S-H77	TTGTTCTTGTCGGGTTAATGGCGC (SEQ ID NO: 12)
2645R-H77	GGGTGTACTACACACATGAGTAAG (SEQ ID NO: 13)
2832R-H77	AAGCGCCCCTAACTGATGATG (SEQ ID NO: 14)
H2751SII	CGTCATCGAT ACCTCAGCGGGCATATGCACTGGACACGGA (SEQ ID NO: 15)
H2786R	GTCCAGTGCATATGCCCGCTGAGG (SEQ ID NO: 16)
H2870R	CATGCACCAGCTGATATAGCGCTTGTAATATG (SEQ ID NO: 17)
H7851S	TCCGTAGAGGAAGCTTGACGCCTGACGCC (SEQ ID NO: 18)
H9140S (M)	CAGAGGAGGCAGGGTGCTATATGTGGCAAGTAC (SEQ ID NO: 19)
H9173R (M)	GTACTTGCCACATATAGCAGCCCTGCCTCCTCTG (SEQ ID NO: 20)
H9471R	CGTCTCTAG ACAGGAAATGGCTTAAGAGGCCGGAGTGTTTACC (SEQ ID NO: 21)
J6-H2556S	TTATGGATGCTCATCTTGTGGGCCAGGCCGAAGCAGCTTTGGAGAACCTCGTAAT ACT CAATGC (SEQ ID NO: 22)
356RF-J6H	AGGATTTGTGCTCATGGTGCACGGTCTACGAG (SEQ ID NO: 23)
1S-J6F ^b	TTTTTTTTGCGGCCGCTAATACGACTCACTATAG ACCCGCCCTAATAGG (SEQ ID NO: 24)
333S-J6	CCGTGCACCATGAGCACAAATCCTAAACCTC (SEQ ID NO: 25)
753R-J6	GGATGTACCCCATGAGGTGCGCAAAG (SEQ ID NO: 26)
2543S-J6F	GTTTGCGCCTGCTTATGGATGCTCATCTTG (SEQ ID NO: 27)
2787R-J6(26)	GCGTCATAAGCATATGCCTGTTGGGG (SEQ ID NO: 28)
3329R-J6	CCCTCAGCACTGGAGTACATCTG (SEQ ID NO: 29)
5487-J6F	CGTCATGCATA CCCTAGGGCGGCTCTCATTGAAGAGGG (SEQ ID NO: 30)
5518R-J6F	CGT6CCCTCTTCAATGAGAGCCGCTCTAGA (SEQ ID NO: 31)
9251S-J6F	GCGGTGAAGACCAAGCTCAAACCTCACTC (SEQ ID NO: 32)
9305R-J6F	AATCTAGA AGGCGCGCTTCCGGCAATGGAGTGAGTTTGAGC (SEQ ID NO: 33)
9310R-J6F	CGTCTCTAG AGGATAAATCCAGGAGGCGCGCTTCCGGC (SEQ ID NO: 34)
9399S-J6F	TACTTTTTGTAGGGGTAGGCCTTTTCC (SEQ ID NO: 35)
9464-J6F	CGTCTCTAG AGTGTAAGTAATGTGTGCCGCTCTA (SEQ ID NO: 36)
9470(24)-J6	CTATGGAGTGTAAGTAATGTGTGC (SEQ ID NO: 37)
J6-3' XR	CGTCTCTAG ACATGATCTGCAGAGAGACCAGTTACGGCACTCTCTGFCAGTCATGC GGCTACGGACCTTTCACAGCTAGCCGTGACTAGGGCTAAGATGGAGCCACC (SEQ ID NO: 38)